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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference Ras 129721			t's file reference	FOR FURTHER ACT	See Notification Preliminary Ex	n of Transmittal of International amination Report (Form PCT/IPEA/416)
	national /DK 03		ation No. 99	International filing date (da 16.07.2003	ay/month/year)	Priority date (day/month/year) 25.07.2002
	International Patent Classification (IPC) or both national classification and IPC C09D191/06					
Appli bioF	cant Point A	ps				
This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.						ernational Preliminary Examining
2.	This	REPO	ORT consists of a total	of 4 sheets, including thi	s cover sheet.	
	This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).					
	These annexes consist of a total of 1-17 sheets.					
	Thic	ropor	t contains indications r	elating to the following ite	ems:	
3.		-		olding to the rene many ma		
l l			Basis of the opinion			
	11		Priority	f eninion with regard to D	velty inventive step	and industrial applicability
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	V	 ✓ Lack of unity of invention ✓ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement 				
	VI		Certain documents c			
	VII					
VIII				ication		
Date of submission of the demand				Date of completion of	f this report	
25.02.2004					22.10.2004	
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DK 03/00499

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1. With regard to the **elements** of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):

	Des	cription, Pages		•
	1-73		as origin	ally filed
	Clai	ms, Numbers		
		·	, manistad	on 27.09.2004 with letter of 22.09.2004
	1-89		received	1011 27.03.2004 With letter of 22.03.2004
	Drav	wings, Sheets		
	1/3-3	3/3	as origin	nally filed
2.	With lang	regard to the langua uage in which the inte	ige, all the elem ernational applic	ents marked above were available or furnished to this Authority in the ation was filed, unless otherwise indicated under this item.
	The	se elements were ava	ilable or furnish	ed to this Authority in the following language: , which is:
		the language of a tra	nslation furnishe	ed for the purposes of the international search (under Rule 23.1(b)).
		the language of publi	cation of the inte	ernational application (under Rule 48.3(b)).
		the language of a tra Rule 55.2 and/or 55.3	nslation furnishe 3).	ed for the purposes of international preliminary examination (under
 With regard to any nucleotide and/or amino acid sequence disclosed in the international application international preliminary examination was carried out on the basis of the sequence listing: 				
		contained in the inter	national applica	ition in written form.
		filed together with the	e international a	pplication in computer readable form.
		furnished subsequen	tly to this Autho	rity in written form.
☐ furnished subsequently to this Authority in computer readable form.				
		in the international a	pplication as file	furnished written sequence listing does not go beyond the disclosure d has been furnished.
		The statement that the listing has been furnitude.	ne information re ished.	ecorded in computer readable form is identical to the written sequence
4.	The	amendments have re	esulted in the ca	ncellation of:
		the description,	pages:	
	\boxtimes	the claims,	Nos.:	90-92
		the drawings,	sheets:	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DK 03/00499

5. C		been considered to go beyond tr	ne aisc	iosure as ille	amendments had not been made, since they have ded (Rule 70.2(c)).
		(Any replacement sheet containi report.)	ing sud	ch amendme	nts must be referred to under item 1 and annexed to this
6. /	Add	itional observations, if necessary	:		
IV.	Lac	k of unity of invention			
		esponse to the invitation to restric	ct or pa	ay additional	fees, the applicant has:
		restricted the claims.			
	Ø	paid additional fees.			
		paid additional fees under prote	st.	•	
		neither restricted nor paid additi			
2.		Rule 68.1, not to invite the appl	icant to	s restrict or h	of invention is not complied with and chose, according to eay additional fees.
3.	Thi	s Authority considers that the rec	quirem	ent of unity o	f invention in accordance with Rules 13.1, 13.2 and 13.3
	×	complied with.			
		not complied with for the follow	ing rea	sons:	
4.	Co	nsequently, the following parts of amination in establishing this rep	f the in ort:	ternational a	pplication were the subject of international preliminary
	Ø	all parts.			
		the parts relating to claims Nos	S		
V.	. Re	easoned statement under Artic lations and explanations suppo	le 35(2 orting	2) with regai such staten	d to novelty, inventive step or industrial applicability nent
1.	St	atement			
	N	ovelty (N)	Yes: No:	Claims Claims	1-89
	in	ventive step (IS)	Yes: No:	Claims Claims	1-89
	In	dustrial applicability (IA)	Yes: No:	Claims Claims	1-89
2	. C	itations and explanations			

see separate sheet

Ad item IV:

Claim 1 refers to novel and inventive coating compositions (see item V). The subject-matter of claim 1 forms a single inventive concept with the other claims on file which all refer to or make use of the compositions defined in claim 1.

Ad item V:

1. Reference is made to the following documents:

D1: US-A-6 033 736 (BLACK ROBERT ET AL) 7 March 2000

D2: DE 197 43 566 A (MORTON INT GMBH) 15 April 1999

D3: FR-A-2 683 540 (CASCO NOBEL FRANCE) 14 May 1993

D4: EP-A-0 798 349 (NEUMANN BERND) 1 October 1997

D5: US-A-5 746 812 (WEISS STEFAN ET AL) 5 May 1998

D6: DATABASE WPI Section Ch, Week 197732 Derwent Publications Ltd., London, GB; Class A82, AN 1977-56430Y XP002261556 & JP 52 076339 A (SAIDEN CHEMICAL KK) 27 June 1977

- 2. Claim 1 refers to coating compositions comprising particles of certain polyolefin waxes. Such compositions are disclosed in D1 to D6. However, claim 1 requires a heating treatment to coalesce the particles of the polyolefin wax after being applied to a surface. This is not the case in D1 to D6. Thus the claimed subject-matter is deemed novel.
- 3. Object of the application is the provision of coating compositions suitable for providing a) a surface with an anti-graffiti coating, for providing b) a surface with a coating against pollution and corrosion and for c) providing an under water structure with an anti-fouling coating. The examples on file demonstrate that this object is solved by the coatings according to claim 1.
 D1 to D6 all refer to at least one of the three objects a) to c). Thus the objective problem to be solved in comparison to the cited prior art was the provision of further coatings which solve the above objects. None of the cited documents could give a hint to the skilled person in order to solve this problem by the coatings according to claim 1.

Thus the claimed subject-matter appears to involve an inventive step.



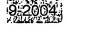
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PATENT CLAIMS

- of a polyolefin wax or of a mixture of polyolefin
 waxes suspended in a liquid phase, wherein the polyolefin wax or the components in the mixture of polyolefin waxes are selected from the group consisting of polyethylene waxes, polypropylene waxes, and oxidized polyethylene and polypropylene waxes, and wherein the coating composition is applied to a surface, the liquid phase is evaporated from the applied coating composition, and the dried, applied coating composition is subjected to a heating treatment to coalesce said wax particles.
- 2. The coating composition according to claim 1 wherein the liquid phase of the coating composition has a boiling point or a boiling point range lower than the melting point or melting point range of the particles of the polyolefin wax or of the mixture of polyolefin waxes.
 - 3. The coating composition according to any of claims 1 to 2 wherein the liquid phase of the coating composition is organic.
- 4. The coating composition according to any of the above claims wherein the liquid phase of the coating composition consists essentially of a member of the group consisting of ethers, esters, ketones, alcohols and mixtures thereof.
- 5. The coating composition according to any of the above claims wherein the liquid phase of the coating composition comprises an alcohol, preferably ethyl alcohol.
 - 6. The coating composition according to claim 5





wherein the liquid phase of the coating composition comprises an alcohol, preferably ethyl alcohol, and water.

- 7. The coating composition according to claim 6 5 wherein the concentration of water, calculated on weight basis, in the liquid phase is up to 50 %.
 - 8. The coating composition according to any of claims 1 to 2 wherein the liquid phase of the coating composition is essentially aqueous.
- 9. The coating composition according to any of the above claims wherein the coating composition, calculated on weight basis, contains:
- polyolefin wax/mixture of polyolefin waxes 1 25
 %, preferably 9 13 %, liquid phase 99 75 %, pref15 erably 91 87%.
- 10. The coating composition according to any of the above claims wherein the coating composition comprises one or more auxiliary agents selected from the group consisting of diluting agents, dispersing agents, conservation agents, emulsifying agents, and colouring agents.
 - 11. The coating composition according to claim 10 wherein the coating composition, calculated on weight basis, contains up to 10% auxiliary agents.
- 25 12. The coating composition according to any of the above claims wherein the coating composition is consisting essentially of particles of a polyolefin wax or of a mixture of polyolefin waxes suspended in a liquid phase.
- 13. The coating composition according to any of the above claims wherein the coating composition is consisting essentially of particles of a polyolefin wax or of a mixture of polyolefin waxes suspended in



a liquid organic or aqueous phase and one or more auxiliary agents selected from the group consisting of diluting agents, dispersing agents, conservation agents, emulsifying agents, and colouring agents.

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- 14. The coating composition according to any of the above claims wherein the polyolefin wax or the components in the mixture of polyolefin waxes suspended in the coating composition is having a degree of polymerisation between 8 and 100, in particular between 20 and 80.
- 15. The coating composition according to claims
 1 to 14 wherein the polyolefin wax or the components
 in the mixture of polyolefin waxes suspended in the
 15 coating composition is an oxidised polyethylene wax.
- 16. The coating composition according to claim 16 wherein the oxidised polyethylene wax has an acid number in the interval of 1 to 100 mg KOH/g, preferably in the interval of 1 to 40 mg KOH/g, more preferably in the interval of 1 to 30 mg KOH/g, even more preferably in the interval of 2 to 20 mg KOH/g, yet more preferably in the interval of 2 to 10 mg KOH/g.
- 17. The coating composition according to any of the above claims wherein the polyolefin wax or one of the components in the mixture of polyolefin waxes suspended in the coating composition is a polyethylene wax.
- 18. The coating composition according to any of the above claims wherein the polyolefin wax is essen-30 tially a polyethylene wax.
 - 19. The coating composition according to any of claims 1 to 18 wherein the particle size of the polyethylene wax is between 0.1 and 100 μm , preferably

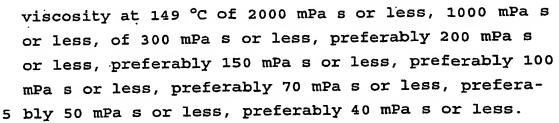


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between 2 and 25 μm , in particular between 4 and 20 μm .

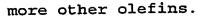
- 20. The coating composition according to any of claims 1 to 19 wherein the melting point of the poly5 ethylene wax is between 70 and 200°C, preferably between 90 and 150°C, in particular between 90 and
 120°C.
- 21. The coating composition according to any of claims 1 to 20 wherein the peak melting point of the 10 polyethylene wax is between 70 and 145°C, preferably between 80 and 140°C, in particular between 90 and 135°C, in particular between 95 and 120°C.
- 22. The coating composition according to any of claims 1 to 21 wherein the polyethylene wax is having a degree of polymerisation between 10 and 3000, in particular between 10 and 2000, in particular between 10 and 500, in particular between 10 and 500, in particular between 20 and 300, in particular between 30 and 200, in particular between 40 and 150, in particular between 40 and 150, in particular between 40 and 100.
- 23. The coating composition according to any of claims 1 to 21 wherein the polyethylene wax is having a degree of polymerisation between 50 and 3000, in particular between 50 and 1500, in particular between 25 60 and 1000.
 - 24. The coating composition according to any of claims 1 to 23 wherein the polyethylene wax is consisting of essentially linear polyethylene.
- 25. The coating composition according to any of 30 claims 1 to 24 wherein the polyethylene wax is a high-density polyethylene, HDPE.
 - 26. The coating composition according to any of claims 1 to 25 wherein the polyethylene wax has a





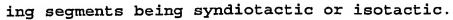
- 27. The coating composition according to any of claims 1 to 26 wherein the polyethylene wax has a molecular weight distribution, M_W/M_n, of 1 to 25, preferably of 1 to 1 0, preferably of 1 to 5, preferably of 1 to 3, preferably of 1 to 2, preferably of 1 to 1.5, preferably of 1 to 1.2.
- 28. The coating composition according to any of claims 1 to 27 wherein the polyethylene wax has a molecular weight Mn in the interval of 400 to 3500 and 15 a molecular weight distribution, M_W/M_n , of 6,0 or less, preferably has a molecular weight M_n in the interval of 400 to 3500 and a molecular weight distribution, M_W/M_n , of 4,0 or less, more preferably has a molecular weight M_n in the interval of 400 to 3500 and 20 a molecular weight distribution, M_W/M_n , of 2,0 or less.
- 29. The coating composition according to any of claims 1, and14 wherein the polyolefin wax or one of the components in the mixture of polyolefin waxes
 25 suspended in the coating composition is a polypropylene wax.
 - 30. The coating composition according to any of claims 1 and 14 wherein the polyolefin wax is essentially a polypropylene wax.
- 31. The coating composition according to any of claims 1 and 14 wherein one of the components in the mixture of polyolefin waxes suspended in the coating composition is a co-polymer of propylene and one or





- 32. The coating composition according to any of claims 1, 14, and 29 to 31 wherein the particle size of the polypropylene wax is between 0.1 and 100 μ m, 5 preferably between 2 and 25 μ m, in particular between 4 and 20 μ m.
- 33. The coating composition according to any of claims 1, 14, and 29 to 32 wherein the melting point of the polypropylene wax is between 70 and 250°C, preferably between 100 and 180°C, in particular between 100 and 140°C.
- 34. The coating composition according to any of claims 1, 14, and 29 to 33 wherein the peak melting point of the polypropylene wax is between 70 and 15 200°C, preferably between 100 and 170°C, in particular between 110 and 160°C, in particular between 120 and 150°C.
- 35. The coating composition according to any of claims 1, 14, and 29 to 34 wherein the polypropylene wax is consisting of essentially unbranched polypropylene molecules.
- 36. The coating composition according to any of claims 1, 14, and 29 to 35 wherein the polypropylene wax is characterised as consisting of essentially 25 isotactic polypropylene molecules.
 - 37. The coating composition according to any of claims 1, 14, and 29 to 35 wherein the polypropylene wax is characterised as consisting of essentially syndiotactic polypropylene molecules.
- 38. The coating composition according to any of claims 1, 14, and 29 to 35 wherein the polypropylene wax is characterised as consisting of essentially stereo block polymer structures, i.e. molecules hav-





- 39. The coating composition according to any of claims 1, 14, and 29 to 38 wherein the polypropylene wax has a viscosity at 190 °C of 400 mPa s or less, preferably 200 mPa s or less, preferably 150 mPa s or less, preferably mPa s or less, preferably 70 mPa s or less, preferably 50 mPa s or less, preferably 40 mPa s or less.
- 40. The coating composition according to any of claims 1, 14, and 29 to 39 wherein the polypropylene wax has a melt flow at 230 °C/2.16 kg of 40 g/min or more, preferably 100 g/min or more, preferably 500 g/min or more, preferably 1000 g/min or more, preferably 4000 g/min or more, preferably 8000 g/min or more.
- 41. The coating composition according to any of claims 1, 14, and 29 to 40 wherein the polypropylene wax has a molecular weight distribution, Mw/Mn, of between 1 and 25, preferably of between 1 and 10, preferably of between 1 and 5, preferably of between 1 and 3, preferably of between 1 and 2, preferably of between 1 and 1.5, preferably of between 1 and 1.2.
- 42. The coating composition according to any of claims 1 to 13 wherein the polyolefin wax or the com25 ponents in the mixture of polyolefin waxes suspended in the coating composition consists essentially of one or more of the alkanes selected from the group of alkanes determined by the generic formula CH₃CHR₁(CH₂CHR₁)_n-CHR₁-CH₃ for n equal to: 15, 16, 17, 18, 19,
- 30 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, where $R_1 = H$ or CH_3 .
 - 43. The coating composition according to any of





- claims 1 to 13 wherein the polyolefin wax or the components in the mixture of polyolefin waxes suspended in the coating composition consists essentially of one or more of the alkanes selected from the group of 5 alkanes determined by the generic formula CH3CHR1-(CH₂CHR₁)_n-CHR₁-CH₃ for n equal to: 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 10 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 15 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 20 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 25 241, 242, 243, 244, 245, 246, 247, 248, where $R_1 = H$ or CH3.
- 44. The coating composition according to any of claims 42 or 43 wherein the alkanes has a number of alkyl groups situated on the carbon backbone of the alkanes as branches, which number is 30 or less, preferably 20 or less, more preferably 10 or less, even more preferably 5 or less.
 - 45. The coating composition according to 4





wherein the alkyl groups situated on the carbon backbone of the alkane are selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, heptyl, octyl, preferably from the group consisting of ethyl, butyl, hexyl, octyl, more preferably from the group consisting of ethyl and butyl, yet more preferably is ethyl.

- 46. The coating composition according to claim 42 or 43 wherein $R_1=CH_3$ and all the methyl groups 10 have the same stereochemistry.
 - 47. The coating composition according to claim 42 or 43 wherein $R_1 = CH_3$ and the stereochemistry changes from one methyl group to a neighbouring other methyl group.
- 15 48. The coating composition according to claim 42 or 43 wherein $R_1 = CH_3$ and the molecular structure is a stereo block.
 - 49. A method of treating a surface comprising the steps of
- 20 providing a coating composition according to any of claims 1 to 48
 - applying said coating composition to the surface;
 - evaporating said liquid phase from the applied coating composition; and
- 25 subjecting said dried, applied coating composition to a heating treatment to coalesce said wax particles.
 - 50. A method of providing a surface with a protecting coating by
- 30 applying a coating composition according to any of claims 1 to 48 to the surface;
 - evaporating said liquid phase from the applied



coating composition;

- subjecting said dried, applied coating composition to a heating treatment to raise the temperature of the dried coating composition to bring said particles of a polyolefin wax or of a mixture of polyolefin waxes into a coalescing state allowing said wax particles to provide a continuous coating of the surface; and
- allowing said heat treated coating composition to
 consolidate to a protective coating.
 - 51. The method according to any of claims 49 to 50 wherein the coating composition is applied to the surface by spraying.
- 52. The method according to any of claims 49 to 15 51 wherein the coating composition is applied to the surface in an amount of 50 to 350 ml per m².
 - 53. The method according to any of the claims 49 to 51, wherein the surface is selected from a surfaced of monuments; buildings; constructions having
- surface structures made of steel, aluminium, sandstone, marble, granite, slate, cement, fibrereinforced cement, bricks, tiles, fibre glassreinforced materials, and wood; public and private transportation vehicles like busses, trains, and
- 25 trolleys; road and traffic signs; sheets; and ship hulls.
 - 54. Use of the coating composition according to any of claims 1 to 48 for treating a surface.
- 55. Use of the coating composition according to 30 any of claims 1 to 48 for providing a surface with an essentially permanent anti-graffiti coating.
 - 56. Use of the coating composition according to



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any of claims 1 to 48 for providing a surface with an essentially permanent coating protecting against pollution and corrosion.

- 57. Use of the coating composition according to 5 any of claims 1 to 48 for providing an under water structure, e.g. a ship hull, with an essentially permanent anti-fouling coating.
- 58. An article of manufacture comprising a structure with a surface obtainable by the method ac10 cording to any of claims 53 to 56.
 - 59. An article of manufacture comprising a structure with a surface obtainable by use of the coating composition according to any of claims 1 to 48.
- 60. A method of treating a sheet comprising the steps of
 - providing a coating composition according to any of claims 1 to 48;
- applying said coating composition to at least one
 surface of the sheet;
 - evaporating said liquid phase from the applied coating composition;
 - subjecting said dried, applied coating composition to a heating treatment to coalesce said wax particles.
 - 61. A method of producing a coated sheet comprising the steps of
- applying a coating composition according to any of claims 1 to 48 to at least one surface of the
 sheet;
 - evaporating said liquid phase from the applied coating composition;



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- subjecting said dried, applied coating composition to a heating treatment to raise the temperature of the dried coating composition to bring said particles of a polyolefin wax or of a mixture of polyolefin waxes into a coalescing state allowing said wax particles to provide a continuous coating of the sheet; and allowing said heat treated coating composition to consolidate to a protective coating.
- 62.A method according to any of claims 60 to 10 61, wherein the sheet is a film.
 - 63. A method according to any of claims 60 to 61, wherein

the sheet 1 is comprising

an adhesive layer 2 having a first major adhesive

15 layer side and a second major adhesive layer side
which defines the bottom surface of the sheet and
a film 3 having a first major film side 4 and a second major film side, said second major film side being bonded to the first major adhesive layer side;

20 and the coating composition being applied to said
first major film side 4.

64. A method according to any of claims 60 to 61, wherein

the sheet 101 is comprising

- an adhesive layer 102 having a first major adhesive layer side and a second major adhesive layer side which defines the bottom surface of the sheet and two or more films 103 each having a first major film side and a second major film side; and
- 30 each film is stacked upon another film such that a second major film side of a film above is bonded to a first major film side of a film below except the low-



est film in the stacked which has its second major film side bonded to the first major adhesive layer side; and

the topmost film side 104 is subjected to said method 5 of coating.

65. A method according to any of claims 60 to 61, wherein

the sheet 201 is comprising

two or more pairs of layers 205, each pair of layers.

10 205 comprising

an adhesive layer 202 having a first major adhesive layer side and a second major adhesive layer side, and a film 203 having a first major film side and a second major film side with the second major film side being bonded to the first major adhesive layer side; and

each pair of layers 205 is stacked upon another pair of layers 205 such that a second major adhesive layer side of a pair above is bonded to a first major film

- 20 side of a pair of layers 205 below; and the topmost film side 204 is subjected to said method of coating.
- 66. A method according to any of claims 60 to 61 wherein the sheet comprises one film with a first 25 major film side and a second major film side; and the first major film side and the second major film side are subjected to said coating method.
- 67. A method according to any of claims 60 to 66 wherein the film further comprises one or more of 30 the applicable substances selected from the group of laquer, overprint clear, clearcoat or backing, and combinations thereof, applied to a major film side.
 - 68.A method according to any of claims 60 to 67



wherein the sheet has a thickness of between 20 microns and 8000 microns, preferably between 30 microns and 5000 microns, more preferably between 30 microns and 2000 microns, even more preferably between 30 microns and 500 microns.

- 69. A method according to any of claims 60 to 68 wherein the film has a thickness of between 20 microns and 4000 microns, preferably between 20 microns and 2000 microns, more preferably between 20 microns 10 and 500 microns, even more preferably between 20 microns and 250 microns.
 - 70. An article comprising a sheet treated by the method of any of claims 60 to 69.
- 71. An article according to claim 70 further 15 comprising a liner bonded to a major sheet surface.
 - 72. An article according to claim 70 to 71 provided as a roll.
 - 73. An article according to claim 70 to 71 provided as a separate sheet.
- 74. A structure which has been covered fully or in part with an article of claim 70, wherein the structure is selected from the group consisting of buildings, parts of buildings, elevators, windows, doors, tiles, walls, partitions, furniture, signs, 25 bill boards, artwork, vehicles.
 - 75. A structure according to claim 74 wherein the vehicle is selected from the group consisting of buses, trains, subway-trains, automobiles.
- 76. Use of an article of claim 70 for providing 30 a surface of a structure according to any of claims 74-75 with an essentially permanent anti-graffiti coating.
 - 77. Use of an article of claim 70 for providing



a surface of a structure according to any of claims 74-75 with an essentially permanent coating protecting against pollution and corrosion.

- 78. A method of providing a surface of a struc-5 ture with a protecting coating by coating a sheet on the structure comprising the steps of
 - applying a coating composition according to any of claims 1 to 48 to the sheet;
- evaporating said liquid phase from the applied
 coating composition;
 - subjecting said dried, applied coating composition to a heating treatment to raise the temperature of the dried coating composition to bring said particles of a polyolefin wax or of a mixture of polyolefin waxes into a coalescing state allowing said
- olefin waxes into a coalescing state allowing said wax particles to provide a continuous coating of the sheet; and
 - allowing said heat treated coating composition to consolidate to a protective coating.
- 79. A method according to claim 78, wherein the sheet is consisting of a film.
 - 80. A method according to claim 78, wherein the sheet 1 is comprising
- an adhesive layer 2 having a first major adhesive
 25 layer side and a second major adhesive layer side
 which defines the bottom surface of the sheet and
 a film 3 having a first major film side 4 and a second major film side, said second major film side being bonded to the first major adhesive layer side;
- 30 and the coating composition being applied to said first major film side 4.
 - 81. A method according to claim 78, wherein

an adhesive layer 102 having a first major adhesive layer side and a second major adhesive layer side which defines the bottom surface of the sheet and 5 two or more films 103 each having a first major film side and a second major film side; and each film is stacked upon another film such that a second major film side of a film above is bonded to a first major film side of a film below except the low-10 est film in the stacked which has its second major film bonded to the first major adhesive layer side; and the topmost film side 104 is subjected to said method of coating.

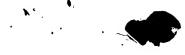
- 15 82. A method according to claim 78, wherein the sheet 201 is comprising two or more pairs of layers 205, each pair of layers 205 comprising
- an adhesive layer 202 having a first major adhesive 20 layer side and a second major adhesive layer side, and
 - a film 203 having a first major film side and a second major film side with the second major film side being bonded to the first major adhesive layer side;
- each pair of layers 205 is stacked upon another pair of layers 205 such that a second major adhesive layer side of a pair above is bonded to a first major film side of a pair of layers 205 below; and
- 30 the topmost film side 204 is subjected to said method of coating.
 - 83. A method according to any of claims 78 to 82 wherein the film further comprises one or more of



the applicable substances selected from the group of laquer, overprint clear, clearcoat or backing, and combinations thereof, applied to a major film side.

- 84. A method according to any of claims 78 to 5 83 wherein the sheet has a thickness of between 20 microns and 8000 microns, preferably between 30 microns and 5000 microns, more preferably between 30 microns and 2000 microns, even more preferably between 30 microns and 500 microns.
- 85. A method according to any of claims 78 to 84 wherein the film has a thickness of between 20 microns and 4000 microns, preferably between 20 microns and 2000 microns, more preferably between 20 microns and 500 microns, even more preferably between 20 microns and 500 microns.
- 86. A structure which has been applied with the method of any of claims 78 to 85, wherein the structure is selected from the group consisting of buildings, parts of buildings, elevators, windows, doors, tiles, walls, partitions, furniture, signs, bill boards, artwork, vehicles.
 - 87. A structure according to claim 86, wherein the vehicle is selected from the group consisting of buses, trains, automobiles, subway-trains.
- 25 88. Use of the method of any of claims 78 to 85 for providing a surface of a structure according to any of claims 86 to 87 with an essentially permanent anti-graffiti coating.
- 89. Use of the method of any of claims 78 to 85
 30 for providing a surface of a structure according to
 any of claims 86 to 87 with an essentially permanent
 coating protecting against pollution and corrosion.





COURTESY COPY OF THE INTERNATIONAL

PRELIMINARY EXAMINATION REPORT

WITH ANNEXES CONTAINING

CLAIMS 1-89 TO BE SUBSTITUTED

FOR ORIGINAL CLAIMS 1-89

FOR EXAMINATION IN THIS CASE

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